

REMARKS

Applicants thank the Examiner for the thorough examination given the present application.

Claims 2, 4-9, 11-13 and 15-19 are pending, and claims 1 and 17 are independent. Claims 13 and 17 are amended to recite the “consisting of” language. No new matter is introduced. Additionally, no new issues have been raised which would require additional search and/or consideration on the part of the Examiner. In the event that the present submission does not place the application into condition for allowance, entry thereof is respectfully requested as placing the application into better form for appeal.

Reconsideration of the present application, as amended, is respectfully requested.

Claim Rejections under 35 USC §§ 102/103

The Examiner has rejected the following claims under 35 USC 102/103:

- (A) Claims 2, 4, 5, 9-11, 13-15 and 17-19 under 35 USC 102(b) as anticipated by or in the alternative under 35 USC 103(a) as obvious over Mizoguchi ‘468;
- (B) Claims 6-9, 12 and 16-18 under 35 USC 103(a) as obvious over Mizoguchi ‘468 in view of Honda ‘429;
- (C) Claims 6-9 under 35 USC 103(a) as obvious over Mizoguchi ‘468 in view of Ijima ‘469;
- (D) Claims 2, 4, 5, 9-11, 13-15 and 17-19 under 35 USC 103(a) as obvious over Mizoguchi ‘468 in view of Minemura ‘095, Ikeda ‘663, Nakagawa ‘529 or Okamoto ‘678;
- (E) Claims 6-9, 12 and 16-18 under 35 USC 103(a) as obvious over Mizoguchi ‘468 in view of Minemura ‘095, Ikeda ‘663, Nakagawa ‘529 or Okamoto ‘678 and further in view of Honda ‘429;
- (F) Claims 6-9 under 35 USC 103(a) as obvious over Mizoguchi ‘468 in view of Minemura ‘095, Ikeda ‘663, Nakagawa ‘529 or Okamoto ‘678 and further in view of Ijima ‘469; and
- (G) Claims 2, 4-19, 11-13 and 15-19 under 35 USC 103(a) as obvious over Honda ‘429 in view of Minemura ‘095, Ikeda ‘663, Nakagawa ‘529 or Okamoto ‘678.

These rejections are respectfully traversed.

Claim 13 of the present invention includes a combination of elements and is directed to a composite sheet for artificial leather, consisting of a non-woven fabric layer made of ultra fine fibers of a polyester based resin or a nylon based resin; a woven or knitted fabric layer made of ultra fine fibers having the same resin as the non-woven fabric and having a fineness of 0.01 to 0.3 denier; and a polyurethane resin, wherein the ultra fine fibers of the non-woven fabric layer and the ultra fine fibers of the woven or knitted fabric layer are entangled with each other and the fineness of the ultra fine fibers of the woven or knitted fabric layer is not more than the fineness of the ultra fine fibers of the non-woven fabric layer.

Also, claim 17 recites a composite sheet for artificial leather, consisting of a non-woven fabric layer made of ultra fine fibers of a polyester based resin or a nylon based resin; a woven or knitted fabric layer made of ultra fine fibers having the same resin as the non-woven fabric layer and having a fineness of 0.01 to 0.3 denier; and a polyurethane resin, wherein the ultra fine fibers of the non-woven fabric layer and the ultra fine fibers of the woven or knitted fabric layer are entangled with each other and the composite sheet has a stitching strength of more than 30kg/mm, an elongation at constant load of less than 20% and a stiffness of less than 80mm.

By way of the claimed invention, the composite sheet possesses excellent softness, uniformity of color, excellent elongation and form stability as shown by the previously filed Declaration.

Mizocuchi relates to a composite fabric composed of (A) a woven or knitted fabric constituent and (B) at least one non-woven fabric constituent, which the non-woven fabric constituent (B) consists of numerous fibrous bundles (1) and numerous individual fibers (2).

Numerous fibrous bundles (1) are composed of a plurality of individual fibers arranged parallel to each other, and varying in the number of the individual fibers from which the bundles are formed. Numerous individual fibers (2) are independent from each other and from the fibrous bundles (1). Also, the woven fabric layer (A) has a denier of 3 or less, more preferably 0.5 to 3. The fibrous bundles (1) of the non-woven fabric layer (B) has a denier of 1-200, more preferably 2-60 and the individual fibers (2) of the non-woven fabric layer (B) has a denier of 0.5 or less, more preferably 0.05-0.5, most preferably 0.01-0.3.

Honda discloses a soft and strong composite sheet for artificial leather that comprises (A) a woven or knitted fabric layer and (B) a non-woven layer intertwined with the fabric. The (A) layer comprises a high twist yarn and the (B) layer has in it a number of fibers of a length greater than 20mm.

The claimed invention is patentably distinct from Mizocuchi and Honda for at least following reasons:

First, the non-woven and woven fabric layers of the claimed invention are distinguishable from those of Mizocuchi in terms of layer composition.

Specifically, the claimed invention recites that a non-woven fabric layer is made of ultra fine fibers of a polyester based resin or a nylon based resin and a woven or knitted fabric layer is made of ultra fine fibers having the same resin as the non-woven fabric layer.

Mizocuchi exemplifies the non-woven and woven fabric layers at column 7, lines 35-59. However, Mizocuchi fails to explicitly disclose the non-woven and woven fabric layers have the same materials. For instance, Examples of Mizocuchi employ different materials for both layers. Particularly, in Example 1 of Mizocuchi, the non-woven fabric layer was made of cellulose and

the woven fabric layer was made of nylon. In Example 8 of Mizocuchi, the non-woven fabric layer was made of nylon and the woven fabric layer was made of polyethylene terephthalate (PET). Therefore, it is clear that the composite sheet of Mizocuchi utilizes different resins for the non-woven and woven fabric layers.

In connection with this part of rejection, the Examiner has indicated at pages 15 and 16 of the outstanding Office Action that *“selecting a known material on the basis of its suitability and desired characteristics are within the general skill of a worker in the art to select a known material on the basis of its suitability and desired characteristics and the results shown in Declaration are not sufficiently unexpected to overcome obviousness.”*

However, it is respectfully submitted that the previously filed Declaration shows that by utilizing the same resin for both the non-woven and woven fabric layers (Sample 1: the present invention), dyeing compatibility between the non-woven and woven fabric layers results in a deeper color. Also, excellent appearance (reduced roughness), softness and touchiness are revealed. However, when the different resins are used for both fabric layers (Sample 2), the properties of Sample 2 are poorer than those of Sample 1 of the present invention. See the previously Declaration at page 3 and Exhibit (Actual Samples 1 and 2). If the cited art would expect these improved results, Mizoguchi would have had such an explicit disclosure. However, the cited art remains silent about them and these superior results are beyond the knowledge and skill of an ordinary person in the art.

With regard to this, the Examiner has stated that *“the results are not unexpected to any degree”* without any specific explanation. In the fiber industry, the difference of “0.1” value with regard to the deep color (L*) and friction coefficient (toughness) leads to the significant results.

The present invention using the same resins for non-woven and woven layers reveals superior effects in color data (44.9 v. 47.0) and toughness (1.7 & 1.3 v. 1.2 & 1.1). Therefore, it should be recognized that such results are unexpected. Further, the previously filed Exhibit shows excellent softness and touchness of composite sheet of the present invention. Therefore, Applicants request again that the claimed invention must be viewed as a selection invention by choosing specific conditions (same resin components for both fabric layers) which give superior results. In this respect, Ex parte Kuhn, 132 USPQ 359 (POBA 1961) states that “the fact that a claimed product is within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some directions or reasons for making such selection.”

As explained above, there is no direction or reason for making such selection, which is required in order for a valid *prima facie* case of anticipation or obviousness.

Similarly, the Honda patent fails to disclose or suggest that the ultrafine fiber constituting the non-woven fabric layer and the ultrafine fiber constituting the woven (knitted) fabric layer are made by the same resin such as those of Sample 1 of the executed Declaration. Further, all of these references are not related to a composite sheet but rather only to a woven fabric. Therefore, their combination cannot arrive at the present invention.

Further, Mizoguchi and Honda fail to disclose or suggest the claimed stitching strength, elongation and stiffness of the composite sheet as recited in claim 17.

Second, the claimed invention is patentably distinct from Mizocuchi and Honda in terms of fineness size of non-woven and woven fabric layers.

The claimed invention employs a woven or knitted fabric layer made of ultra fine fiber having a fineness of 0.01 to 0.3 denier. Also, in the claimed invention, the fineness of the ultra fine fibers of the woven or knitted fabric layer is not more than the fineness of the ultra fine fibers of the non-woven fabric layer.

Mizocuchi discloses the fineness of the woven fabric fiber layer is 3 or less denier, more preferably 0.5 to 3 denier. See column 8, lines 51-57 of Mizocuchi. However, although the claimed range “0.01 to 0.3” appears to be within the Mizocuchi range of 3 or less, Mizocuchi fails to even specifically recognize the claimed range “0.01 to 0.3” as a preferable one. Also, the fineness of the fibrous bundle of non-woven fabric layer of Mizocuchi is 1 to 200, more preferably 2 to 60. The fineness of the individual fine fibers from which the fibrous bundles are formed has a denier of 0.5 or less, more preferably 0.005 to 0.5, or most preferably 0.01 to 0.3. In fact, the fineness of the woven or knitted fabric layer of Mizoguchi is generally larger than that of the non-woven fabric layer of Mizoguchi. Thus, Mizoguchi fails to disclose or suggest the claimed features that the fineness of the ultra fine fibers of the woven or knitted fabric layer is not more than the fineness of the ultra fine fibers of the non- woven fabric layer.

Further, in the case of Honda, the fineness of yarn constituting the woven or knitted fabric layer is more than 2 denier (please refer to the Examples showing 76 denier/36 filaments). Also, the fineness of the yarn constituting the non-woven fabric layer is less than 0.8 denier (please refer to Col. 3, lines 52-56 of Honda). Accordingly, in Honda, the fineness of the yarn constituting the woven or knitted fabric layer of is always larger than the fineness of the yarn constituting the non-woven fabric. Thus, Honda fails to disclose or suggest the claimed features.

In connection with this issue, the Examiner has indicated at page 14 of the outstanding Office Action that *“Honda discloses the non-woven fabric layer may be made of ultra fine fibers having a fineness of between 0.01 to 0.3 denier (column 3, lines 52-62) while Minemura, Ikeda, Nakagawa, and Okamoto each disclose that the woven or knitted fabric layer may be made of ultra fine fibers having a fineness of between 0.01 to 0.3 denier. Therefore, the applied prior art teaches that the fineness of the ultra fine fibers of the woven or knitted fabric layers may be not more than the fineness of the ultra fine fibers of the nonwoven fabric layer.”*

However, if Honda (using 2 or more denier of woven fabric layer) would combine the secondary references including Minemura, Ikeda, Nakagawa, and Okamoto (using the non-woven fabric layer having a smaller denier than the woven-fabric layer), a composite sheet Honda cannot achieve its own intended purpose because the woven fabric layer fineness of Honda should be larger than the non-woven fabric layer fineness of Honda.

Also, it is respectfully submitted that the previously filed Declaration evidences that by specifying the claimed fineness range for both layers (Sample 1: the present invention), superior properties such as richness of color, excellent appearance (reduced roughness), softness and touchiness are proven as compared to Sample 2 corresponding to the cited art. Specifically, Sample 2 shows that the fineness of woven fabric fiber layer of 1.05 is outside of the claimed range and also the fineness of the woven fabric fiber layer is larger than that of the non-woven fabric fiber. Therefore, Sample 2 is in contrast to the claimed ranges. By this outside range, Sample 2 exhibits inferior properties to Sample 1 in terms of color, softness, touchiness and roughness (appearance). See the previously filed Declaration at page 3 and Exhibit (Actual Samples 1 and 2). Also, in the previously filed Declaration of November 20, 2007, the stiffness

and elongation of Samples 3 and 5 having a fineness of 1.0 denier like the cited art showed larger than those of Samples 2 and 4 having a fineness of 0.06 denier of the claimed invention. Accordingly, these superior effects of the claimed invention cannot be obtained with Michocuchi or Honda's ranges. Thus, the claimed fineness is beyond routine skill in the art.

If the cited art would expect these improved results, Mizoguchi or Honda would have had such an explicit disclosure as to denier values. However, the cited art remains silent about them and this distinction is beyond those of ordinary skill in the art. Thus, Applicants submit again that the claimed invention must be viewed as a selection invention by choosing specific conditions (the claimed range of woven fabric layer and range relationship between the two layers) which give superior results. With regard to this selective invention, Applicants respectfully wish to draw the Examiner's attention to the above case law and MPEP 2131 and 2143.03 standards.

Since none of the cited references relied upon by the Examiner including Mizoguchi, Honda, Minemura, Nakagawa, Ikeda and Okamoto, either alone or in combination, recognize the features of the present invention as discussed hereinabove, any possible combination of the cited references relied upon by the Examiner cannot possibly teach or suggest the present invention without reconstructing the teachings of the references in view of the Applicants' own disclosure.

As discussed above, the present invention is distinct from the cited art in that none of the references relied upon by the Examiner, either alone or in combination.

Accordingly, in view of the remarks, reconsideration of the rejections and allowance of all of the claims of the present application are respectfully requested.

Conclusion

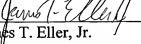
In view of the above remarks, Applicants believe that pending application is now in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact James T. Eller Jr., Reg. No. 39,538 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

By 
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